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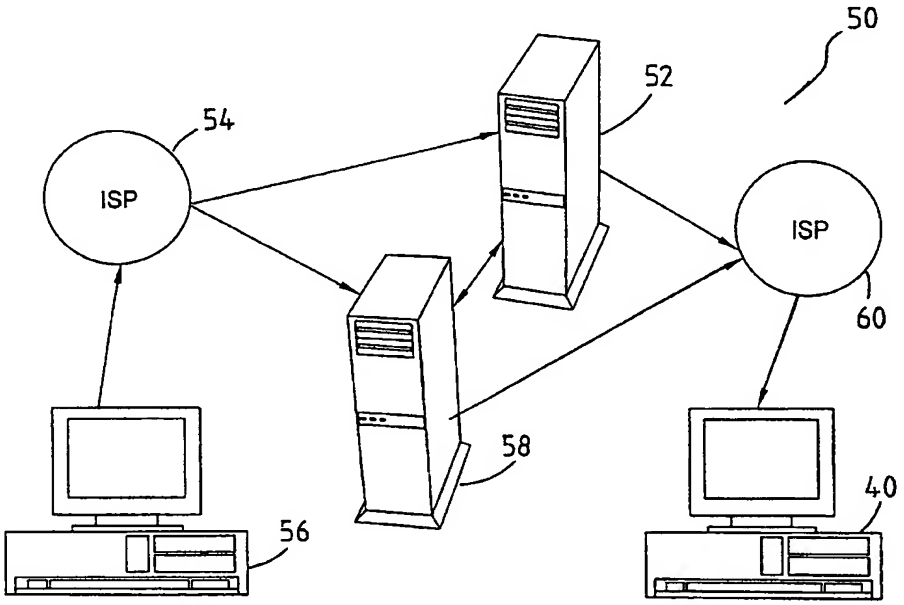
(54) Title: SYSTEM AND METHOD FOR ACCESSING NETWORK SITES



(57) Abstract: A system and method for accessing and communicating electronic information over an electronic network using a numerical addressing system (NAS 1). A preferred embodiment of the system/method includes a user interface (30) and a mapping database (20), which provide access to a target network site (40) using a predetermined numerical identification code (NIC 2) that is previously reserved for an entity in privity with the target site (40).

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SYSTEM AND METHOD FOR ACCESSING NETWORK SITES

FIELD OF THE INVENTION

The present invention relates to a system and method for accessing communications terminals or sites over an electronic network using a numerical addressing system, and in particular but not limited the present invention is for providing access to a web site using a numerical identification code and for communicating electronic information.

BACKGROUND OF THE INVENTION

Transactional events and communication via electronic networks have been increasing at an unprecedented rate over the last few years due to developments in communications technology and in turn to the popularity of services and information provided on-line. For example, most organizations such as governments, interest groups, and businesses, currently have web sites on the Internet for providing information about the services and information they provide. Not only do these organizations typically have Internet sites, but they also have Intranets or similar networks for facilitating communication and transactions.

Recent developments in secure communications technology further encourage businesses and individuals to use web sites as a vehicle for business dealings such as banking services, selling and distribution of goods, information, or services, as well as other secure communications.

User friendly browser programs such as Internet Explorer from Microsoft and Navigator from Netscape facilitate electronic communication. These browsers use a domain name to access a particular web site. Due to the recent boom in communication and transactions via electronic networks, the number of domain names has increased dramatically. This has led to the development of complex searching schemes and systems for organizing the resulting morass of domain names.

Within the Internet, for example, a domain name system (DNS) provides this organization. The Internet Network Information Center ("INIC," http://www.internic.net) manages the root of the DNS database on the Internet. INIC organizes domain names at the lop-level by organization and country. Two-

and three-letter abbreviations are used for countries, and various abbreviations are reserved for use by organizations. For example, INIC assigns each web site a domain name in the form of AAAAANNNN.XXX.CC where A is a letter, N is a number, XXX is an organization type code which can be COM, NET, EDU, or ORG, and CC is a two letter country code.

The DNS maps domain names (*e.g.*, www.entrycomputers.com.au) into Internet protocol (IP) addresses (*e.g.*, http://203.147.224.24). Because of the impracticality of maintaining all domain names and IP addresses at a central location, the DNS distributes the domain names and IP addresses throughout the Internet in DNS servers in a hierarchy of authority.

For example, all Internet systems belonging to a particular university ("University") can have domain names within the university.edu domain. The name server delegates the responsibility for managing the university.edu namespace to another name server system operated by University's telecommunication standards body (univtelecomserver.edu—IP address 123.456.789.012). This "Telecom" name server can, in turn, delegate portions of the university.edu name space to departmental name servers on campus (e.g., CS.university.edu, Math.university.edu or Physics.university.edu) and so on.

In addition to the Internet being divided by name into domains and subdomains, such as university.edu for University and Corporation.com for a corporation, DNS divides the Internet by number into networks and subnets, such as 123.456.0.0 and 987.65.0.0 for University and Corporation, respectively. Layout of the Internet by name tracks the administrative responsibility (ownership), while layout by number tracks the physical topology.

There is no necessary relationship between the name of an object in the Internet and the number or its network or subnetwork, however. For example, the 123.456.0.0 network can physically reside at the University. However, if a computer belonging to Corporation were connected to the University network, its name would still be abcde.Corporation.com even though its number would be 123.456.xxx.yyy.

The primary function that the DNS performs is to map between names and numbers. Thus, upon receipt of a domain name request, the DNS server either maps the domain name to its respective IP address or forwards it on to other servers until it reaches the intended server.

While the DNS has been widely accepted, it has certain shortcomings in a quickly expanding communication system. If one desires to locate a web site of a certain individual or company, he or she must enter the exact domain name assigned to that individual or company. Quite often, the user can not know the exact domain name and lists of domain names are not readily available, which can frustrate the user and delay access to the desired site. For example, if an individual named Robert Smith has a personal web site, his domain name can include any number of combinations (*e.g.*, RobertSmith, SmithRobert, BobSmith, Bsmith, Rsmith. etc.). Middle initials, nicknames, or upper and lower case alpha entries can also be used within the domain name, which can cause confusion. The increase in activity on such networks increases the likelihood of conflicts between users having identical or similar names.

As another example, a corporation like Coca-Cola can also have various domain name configurations (e.g., Coca-Cola, Coke, Coca-Cola.inc), which can limit access or identification of the correct entity for tracking, billing, or related purposes. Domain names can also end in a variety of endings (.com, .net, .edu, or .org), which can further complicate exact recall of the domain name.

Existing systems also suffer from "cybersquatting." Cybersquatting is reserving a domain name or various domain names for the purpose of licensing or selling it at a later point in time to a company that wants to use it. Commercial domain names, for example, are obtained from one of several registries or companies authorized to ensure that the domain name you want is unique (no one else already has it) and issue it to you if it is. However, these registries make no attempt to determine whether the domain name is one that rightfully ought to go to someone else. In other words, the present system operates on a first-come, first-served basis.

For this reason, a number of enterprising individuals and companies have applied for and reserved domain names that they think someone else will want, either now or in the future. Well known companies or their products, sports figures, celebrities, political candidates, and others often discover that someone else has already reserved the domain name (e.g. "sammysosa.com") they would most likely want to use. Although trademark and developing laws may offer some protection, it is often cheaper to buy the domain name from the cybersquatter than it is to sue for its use. Many cybersquatters also reserve common English words, reasoning that sooner or later someone or some entity will want to use them for their own network sites (e.g., drugstore.com, furniture.com, gardening.com, and Internet.com). Auction sites and cybersquatter company sites sometimes list domain names for sale. Several cybersquatter companies offer their wares at their own sites. Since there is an initial and yearly fee for owning a domain name, some cybersquatters reserve a long list of names and defer paying for them until forced to, thus preempting use by others at no cost to themselves.

Registry companies and other organizations (e.g., Internet Corporation for Assigned Names and Numbers, ICANN), which control the domain name registrars, are working on a process for resolving domain name disagreements outside of the regular court system.

Current traditional systems not only result in delay and frustration in correctly accessing a network site as described, but they fail to provide for legitimate registration by, and absolute identification of, the domain name holder in many instances.

SUMMARY OF THE INVENTION

The present invention relates to a system and method for accessing and communicating electronic information over an electronic network using a numerical addressing system ("NAS"). In particular, the present invention provides alternative access to a web site using a numerical or alphanumerical identification code ("NIC") that is reserved for an entity in privity with the network site. The present invention overcomes the limitations of DNS and other conventional systems while working cooperatively with such systems.

In a preferred embodiment, the present invention includes a user interface *(e.g.,* personal computer) and a mapping database, wherein both the user interface and the mapping database incorporate NAS services. Contrary to traditional systems, the NAS of the present invention obviates the need to procure or register and pay for a domain name before it is needed to prevent cybersquatting, as no other individual or entity can hold or use the identification *(e.g.,* telephone) number, unless the individual or entity has previously registered for that particular identification number with the appropriate entity.

In operation, an end user accesses a particular web site by entering either a domain name, or in a preferred embodiment, a telephone number and country and regional calling codes via the user interface. The NAS software combines the entered information into a new NIC, which is then sent to the mapping database.

The mapping database receives the new NIC, and NAS at the database location interrogates the database for a site address corresponding to the received NIC. If the NAS finds a match, it maps the received NIC to its corresponding IP address found within a lookup table in the database. NAS then replaces the received NIC with the corresponding IP address and sends it through the network to the target site.

A preferred embodiment inherently provides security by prohibiting access to its services without proof of a registered phone connection obtained through the normal issue, payment, and maintenance process of telephone accounts.

In alternative embodiments, NAS efficiently categorizes network sites by adding an extension to each NIC. For example, in one embodiment a letter or letters representing distinct sub-categories of the content offered on the site (e.g., for gambling—33491234.g) is appended to the NIC. These extensions provide entities or end users the ability to pre-select, censor, or search sites by sub-category. In another embodiment, each NIC includes a telephone extension, which can also be used to identify particular sub-categories or related sites.

In another embodiment using alphanumeric NICs, NAS automatically decodes the alphanumeric NICs by converting letter used in the header portion into

a previously assigned number, *(i.e.,* I3ISHOP.e to1317467.e). The number is then processed according to a preferred embodiment.

NAS can also be configured in networks to effect alternative access systems. For example, one embodiment accesses network sites without the intermediary mapping database. Rather, the user terminal receives a NIC input from the user, maps NIC to its corresponding IP address, and transmits this address to the target site. In effect, the user terminal performs the functions performed by the mapping database as well as its own functions. This embodiment obviates the need for a separate database and the hyperlink to the database as described herein. This embodiment can be ideal in a smaller or closed network, such as an Intranet, but could also clearly be used within The Internet or other network.

In another embodiment, the target site also includes NAS features. The user terminal functions as originally described above (without the mapping database capabilities). NAS, within the target site, processes the received data in two alternative methods. First, the target site includes capabilities of the mapping database for receiving and mapping the data to the desired IP address. Second, the target site simply receives data containing NIC and automatically contacts the desired site without conversion to an IP address.

BRIEF DESCRIPTION OF THE DRAWINGS

In order that the present invention can be more readily understood and be put into practical effect, reference will now be made to the accompanying drawings which refer to preferred embodiments of the invention and wherein:-

Fig. 1 illustrates a system view of a preferred embodiment of the invention;

Fig. 2 shows a tiered access structure for the numerical addressing system;

Fig. 3 demonstrates a portion of an entry form provided by the user interface;

Fig. 4 illustrates schematically an Internet access system of another preferred embodiment of the invention;

Fig. 5 is a portion of a browser page incorporating the user form of Figure 3 and showing a user entered numerical code for a web site request; and

Fig. 6 is a portion of a browser page displaying the retrieved domain name corresponding to the numerical code for a web site request.

DETAILED DESCRIPTION OF THE DRAWINGS

Numerical Addressing System

The system and method of a preferred embodiment will now be discussed with reference to Figs. 1, 2 and 3. Fig. 1 illustrates a system view of a preferred embodiment of the invention.

In a preferred embodiment, the present invention resides in a numerical addressing system NAS 1, which includes a mapping database 20 and a user interface 30. NAS 1 accesses and communicates electronic information to a target network site 40 over an electronic network using a numerical identification code NIC 2. In general, mapping database 20 receives a data signal, which includes NIC 2, from user interface 30, maps the received data signal to a target network site address 4, and sends the mapped data signal 4 to the corresponding network site.

According to the embodiments described herein, NICs 2 can be any predetermined numeric or alphanumeric that uniquely identifies a network site. NICs 2 include but are not limited to telephone numbers, which are predetermined by telephone carriers to provide a globally unique number for the subscriber. NICs 2 can also include county *(e.g.* 61 for Australia) and region (e.g., 7 for Queensland) calling codes, telephone extension numbers, and categorical letters *(e.g.,* 61733491234.e).

The network sites, such as target network site 40, include but are not limited to personal computers, servers, nodes, databases, and similar devices. Applicable networks include but are not limited to the Internet, Intranets, local area networks ("LANs"), wide area networks ("WANs"), public switched telephone network ("PSTN"), virtual area networks ("VANs"), metropolitan area networks ("MANs"), and other such networks. In the embodiments described herein, the network is the Internet, the network site addresses are Internet protocol (IP) addresses, and the servers include web sites.

Fig. 2 demonstrates a tiered access structure for NAS 1. NAS 1 is compatible with the devices, hardware, and applications shown in Fig. 2. Accordingly, web browsers, navigation programs, or other search engines that are compatible with NAS 1 can communicate or conduct transactions over the network using NICs 2.

This includes all IP based extensions in each of the layers. NAS 1 is compatible with Windows, Macintosh, Linux, Novell, Unix, Windows NT, DEC's virtual memory system (VMS), IBM's multiple virtual storage (MVS) or OS/2, AIX, OS/390, Palm OS and other portable operating systems, and similar operating systems. In addition, NAS 1 is compatible with C++, Java, SQL, Markup Languages, Java Script, and similar programming or script languages.

In a preferred embodiment, NAS 1 is implemented in software and portions of NAS 1 program can be easily distributed or downloaded. While the functions performed by the described embodiment are implemented in software, it is understood that these functions can be implemented in hardware or firmware.

NAS 1 requires no new hardware and is compatible with current hardware, software, and firmware applications. NAS 1 also supports presently emerging technologies (e.g., Internet phone and household appliances with Internet access). NAS 1 can also reside on different communications server, hardware, and software platforms.

Subscriber Access to NAS Services

In order to access NAS 1 services, subscribers must be in privity with an appropriate body through a registration process. Subscribers can request that their NICs 2 be attributed to a database, an application, or an operating system through various channels. These channels include but should not be limited to: DNS, telecommunication companies, telephone companies, licensed third party retailers that provide Internet equipment (e.g., modems) or Internet browsers or Internet connection or maintenance services, licensed ISP retailers, or telephone directory entities.

In a preferred embodiment in which NICs include telephone numbers, NAS subscribers must have a phone number to access NAS services. Phone companies can process these registrations in the normal manner. In addition, phone companies can include in their existing billing or registration procedures a simple one step sign-on application, which allows existing phone subscribers to register their numbers in NAS 1 along with the details of their DNS numbers or network sites. In

similar fashion, phone companies, DNS, or the like may cancel the use of NAS 1 if the phone connection is cancelled or payments are delinquent.

Existing domain name holders may utilize NAS 1 by contacting their domain name provider (e.g. DNS), which may charge appropriate fees and enable NAS service upon proof of ownership of the telephone number listing requested. Fees may also be collected upon registration of domain name renewals.

Non-domain name holders desiring a domain name can register via the existing commercial process. An option for NAS features may be included in this registration process with associated annual fees or charges. As discussed above, with NAS 1, there is no need to procure or register a site until it is needed, as no other entity can hold or use the identification (telephone) number, unless it has previously registered for that particular number with the appropriate entity.

End users can use NAS 1 service in a manner similar to the way they currently access web sites. NAS 1 service familiarizes network access for beginners who are not familiar with domain names, but who are already familiar and comfortable with phone number access. Moreover, the use of phone numbers enhances traditional access systems, because users can consult a phone book or the like if they are unsure of a domain name. In this manner, users can directly access a desired site, without having to access a search engine and sort through the search results. Phone books, whether bound or compiled on CDs or electronic databases, currently exist, which further increases access at little cost. Users can also verify the physical connection of NAS 1 by contacting the physical line application (e.g. Entry Computers = 61733491234) to verify the dial number.

Referring back to Fig 1, a preferred embodiment of a network incorporating NAS 1 is described. As shown, the present invention can include mapping database 20 and user interface 30, wherein both user interface 30 and mapping database 20 incorporate NAS technology. Each system component is connected via communication media, including but not limited to PSTN lines, cellular, satellite, microwave, optical fibre, dedicated land lines, personal communication systems ("PCS"), TCP/IP, ADSL, HDSL, XDSL, and any technology connecting microprocessor based appliances, servers, and end users.

User Interface

User interface 30 of a preferred embodiment is preferably a personal computer located at an end user location, but may include a variety of devices capable of accessing a network site. The personal computer interfaces with mapping database 20 via conventional technology. In a preferred embodiment, user interface 30 includes a browser for accessing a network site. While this embodiment is described with reference to existing browser applications, NAS 1 can be used with any such application or as part of an independent browser tool. NAS 1 also interfaces with thin clients, third party software, client software, Winsock (Mac), or the like.

In a preferred embodiment, a user can access a particular web site by entering either a domain name or NIC 2. For example, the user can enter NIC 2 as prompted by entry boxes as shown in Fig. 3. These or similar entry boxes can be implemented on web browser forms as necessitated. For telephone numbers according to a preferred embodiment, such forms can include a first box, C1, for the country calling code, a second box, C2, for the regional calling code, and a third box, C3, for the local telephone number.

In one embodiment, the codes in boxes C1 and C2 default to the locations of the user's computer. In the example shown, the location is Queensland, Australia. For accessing web sites of organizations located in Australia but outside Queensland, for example, the code for a target state can be entered manually, if known, in box C2 or by clicking the arrow button in box C2 to reveal a drop down menu listing all the states in Australia for selection. Similarly the target country code can be manually entered or selected from a drop down menu.

This preferred embodiment prevents duplications on a global basis as phone numbers are predetermined and unique to the end subscriber. Alternatively, NIC 2 can be any number uniquely identifying the user; wherein user interface 30 would provide an appropriate entry form. NAS 1 can also be written and referenced in multiple languages.

Phone Extensions

In another embodiment, NAS 1 uses extension numbers, which NAS 1 appends to NIC 2.

The user enters the extension numbers (e.g., NNN) into an optional extension box (not shown). NAS 1 combines this extension with the C1, C2, and C3 boxes as discussed above. Similar extensions could be added to extend further into the structure of desired network site 40.

Alphanumeric NICs

In an embodiment using alphanumeric NICs 2, NAS 1 automatically decodes the alphanumeric NICs 2 by converting a letter into a predetermined number. For example, traditional telecommunication dial-up pads are based upon the following code (2=abc, 3=def, 4=ghi, 5=jkl, 6=mno, 7=pqrs, 8=tuv, 9=wxyz). According to this code, NAS 1 would automatically convert a NIC such as 131SHOP.e to 131467.e and proceed as described above. NAS 1 allows for this and other such coding schemes.

As Fig. 3 shows, the browser application can include additional features. When the user is ready to send the request, he or she presses the send request button, which combines boxes C1, C2, C3, and X, which is further described below. NAS 1 sends this combined NIC to mapping database 20. For convenience, the browser program can also include a "RESET" button, as shown, for clearing the telephone entry and resetting the country and region (state or city) calling codes to defaults.

Mapping Database

A preferred embodiment further comprises a mapping database with NAS 1 installed therein. Mapping database 20 connects to a network by conventional communication media and is accessible by the end user computers within that network. As shown in Fig. 2, NAS 1 supports structured query language (SQL), open database connectivity (ODBC), relational database management system (RDBMS), database management system (DBMS), and similar programs for accessing and managing databases.

Desirably when mapping database 20 receives the combined NIC 2, NAS 1 interrogates a lookup table within the database for a site address corresponding to NIC 2. In a preferred embodiment, the lookup table includes a list of phone numbers and a list of network sites, wherein each phone number corresponds to a particular network site. The interrogation involves comparing the received telephone number to the telephone numbers within the lookup table, and if needed the country, region, or extension codes associated therewith. NAS 1 then maps the phone number to its corresponding IP address found within the lookup table.

The database includes NAS mapping code, which complies with existing hypertext transfer protocol standards. NAS 1 software links the new registered domain name structure to the existing DNS structure, which results in a new domain name structure. For example, components of a typical string include a domain name *(e.g.,* www.entrycomputers.com.au). An IP address (eg., http://203.147.224.24), and a phone number (e.g., 61-7-33491234). The resulting string is 61733491234.e = www.entrycomputers.com.au http://203.147.224.24/shop/welcome.cfm. NAS 1 replaces NIC 2 with the corresponding IP address and forwards it over the network to the target site.

Categorization

In an alternative embodiment, NAS 1 efficiently categorizes network sites by adding a categorical letter or letters representing distinct sub-categories of the content offered on the site to NIC 2. These attachments provide for pre-selection by users or adult censorship of access by children or pre-filtering of sites by users in schools, governments, or commercial sites. In addition, this embodiment enables an alternative searching method (by sub-category), which is likely to be much faster than conventional methods. Each sub-category is licensed within NAS 1 at the time of application. For example, the following samples of sub-categories could be included:

(g)	for gambling	(3349 1234.g);
(e)	for e-commerce	(3349 1234.e);
(m)	for medical	(3349 1234.m); or
(a)	for adult	(33491234.a).

Security

NAS 1 provides an extra layer of security by using telephony based numbers to request and receive information. NAS 1 will not license or otherwise permit access to its services without a landline or mobile connection, which in turn provides security for the end user. Additional security provided through the normal issue, payment, and maintenance process of telephone accounts would also, in effect, secure access to NAS driven sites, albeit in a manner quite independent of telecommunications companies and which does not infringe the commercial rights thereof.

With the expansion of offices to include virtual offices (at home or travelling), software companies are currently offering online databases that operate from their Internet sites and thin networks. A central network location stores the company databases, rather than having to maintain IT staff. NAS 1 provides security for these companies in that they can dial into their own databases on a number common to them and their databases.

NAS 1 can also be configured in networks to effect alternative access systems. For example, one embodiment accesses network sites without the intermediary mapping database. Rather, the user terminal receives a NIC input from the user, maps NIC 2 to its corresponding IP address, and transmits this address to the target site. In effect, the user terminal performs the functions performed by mapping database 20 as well as its own functions. This embodiment obviates the need for a separate database and the hyperlink to the database as described herein. This embodiment can be ideal in a smaller or closed network, such as an Intranet, but could clearly be used within the Internet or other networks.

In another embodiment, the target site also includes NAS 1 features. The user terminal functions as originally described above (without mapping database 20 capabilities). NAS 1, within the target site, processes the received data in two alternative methods. The target site can include the mapping database capabilities for receiving and mapping the data to the desired IP address. Alternatively, the target site can simply receive data containing NIC 2 and automatically provide access to the desired site without conversion to an IP address.

Another preferred embodiment includes a method for accessing a network site according to the system described above. This method includes, in part, the steps of:- entering a predetermined numerical identification code (e.g., phone number) that is reserved for an entity in privity with said network site; receiving the numerical code; and mapping the numerical code to a network address corresponding to the network site. In addition, this method can also include any of the following steps: combining the phone number, the country calling code, and the regional calling code; appending an alphanumeric extension to the phone number; wherein the alphanumeric extension represents a category or subcategory of the network site; receiving at the network site the phone number from user interface 30; or receiving at the network site the phone number or the network address from the database.

Referring now to the preferred embodiment illustrated in Fig. 4, there is shown an Internet access system 50 having a client address mapping server 52 arranged for receiving NICs 2 from a forwarding Internet service provider server (ISP) 54. Typically the NICs 2 are requested by clients using communications devices such as a client computer 56 running a user interface 30 in the form of a browser program such as Microsoft Internet Explorer that has been adapted to communicate NICs 2 to ISP 54. Figure 5 shows an example where the browser program is configured to allow a client to request access to web sites with NICs 2 in the form of telephone numbers.

The mapping server 52 includes the mapping database 20 described earlier with reference to Figures 1 to 3. On receiving a NIC 2 such as the telephone number 61 7 33491234 shown in Figure 5, the server 52 searches the database 20 and retrieves the address 4 which in this case is the domain name www.entrycomputers.com.au of the target network site 40. The retrieved network site address 4 (i.e. www.entrycomputers.com.au) is then forwarded to a server 58 of the Internet Corporation for Assigned Names and Numbers (ICANN) for obtaining the Internet protocol (IP) address corresponding to www.entrycomputers.com.au. In this case the IP address is http://203.147.224.24.

The server 52 communicates the obtained IP address and other communications data over the Internet to locate the target network site 40 through an associated ISP 60. In response the target site 40 sends the requested web page to the client computer 56 over the Internet and the web page is displayed on the client computer 56 as shown in Figure 6.

In an alternative form of the system 50 the mapping server 52 can be arranged to return the retrieved network site address 4 to the ISP 54 which then forwards the address 4 to the ICANN server 58 as customary in the prior art.

Those skilled in the art will know or be able to ascertain without undue experimentation, many equivalents to the specific embodiments and methods of the present invention as described herein. These and all other equivalents are intended to fall within the scope of the following claims.

CLAIMS

1. A network site accessing system, comprising:

a user interface disposed to receive a predetermined numerical code that is reserved for an entity in privity with a network site; and

a database operatively coupled to said user interface, wherein said database receives said numerical code from said user interface and maps said numerical code to a network address corresponding to said network site.

2. A system as claimed in claim 1, wherein said numerical code is an alphanumeric

3. A system as claimed in claim 1, wherein said numerical code includes an alphanumeric that represents a category of said network site.

4. A system as claimed in claim 1, wherein said network site is capable of receiving said numerical code from said user interface and capable of receiving said numerical code or said network address from said database.

5. A system as claimed in claim 1, wherein said database includes a lookup table for mapping said numerical code to said network site address.

6. A system as claimed in claim 1, wherein said network address is an internet protocol address that complies with hypertext transfer protocol.

7. A system as claimed in claim 1, wherein said user interface is a computer.

8. A system as claimed in claim 1, wherein said numerical code is a phone number.

9. A system as claimed in claim 8, wherein said phone number includes a country calling code and a regional calling code of a particular calling region.

10. A system as claimed in claim 9, wherein said phone number, said country calling code, and said regional calling code are combined before being received by said database.

11. A system as claimed in claim 8, wherein said phone number includes a numerical phone extension.

12. A network site accessing system, comprising:

a user interface disposed to receive a predetermined numerical code that is reserved for an entity in privity with a network site, wherein said network site is operatively coupled to said user interface.

13. A system as claimed in claim 12, wherein said user interface is capable of mapping said numerical code to a network address corresponding to said network site, and wherein said network site is capable of receiving said network address from said user interface.

14. A system as claimed in claim 12, wherein said numerical code is an alphanumeric.

15. A system as claimed in claim 12, wherein said numerical code includes an alphanumeric that represents a category of said network site.

16. A system as claimed in claim 12, wherein said numerical code is a phone number.

17. A system as claimed in claim 16, wherein said phone number includes a country code and a region code of a particular calling region.

18. A system as claimed in claim 12, wherein said network site is capable of receiving and mapping said numerical code to a network address corresponding to said network site.

19. A system as claimed in claim 18, wherein said numerical code is a phone number.

20. A method for accessing a network site, comprising:

entering a predetermined numerical identification code that is reserved for an entity in privity with said network site;

receiving said numerical code; and

mapping said numerical code to a network address corresponding to said network site.

21. A method as claimed in claim 20, wherein said network address is an Internet protocol address that complies with hypertext transfer protocol.

22. A method as claimed in claim 20, wherein said user interface is a computer.

23. A method as claimed in claim 20, wherein said numerical code is an alphanumeric.

24. A method as claimed in claim 20, wherein said method further includes the step of appending an alphanumeric extension to said numerical code, wherein said alphanumeric extension represents a category of said network site.

25. A method as claimed in claim 20, wherein said method further includes the step of receiving at said network site said numerical code from said user interface.

26. A method as claimed in claim 20, wherein said method further includes the step of receiving at said network site said numerical code or said network address from said database.

27. A method as claimed in claim 20, wherein said database includes a lookup table for mapping said numerical code to said network site address.

28. A method as claimed in claim 20, wherein said numerical code is a phone number.

29. A method as claimed in claim 28, wherein said phone number includes a country calling code and a regional calling code of a particular calling region.

30. A method as claimed in claim 29, wherein said method further includes the step of combining said phone number, said country calling code, and said regional calling code.

31. A method as claimed in claim 28, wherein said phone number includes a numerical phone extension.

32. A system for accessing a network site, comprising:

a user interface, wherein said user interface includes a client application for accessing a network site, and wherein said client application is capable of receiving a phone number; and

a database coupled to said user interface, wherein said database receives said phone number from said user interface and maps said phone number *to* a network address corresponding to said network site by interrogating a lookup table stored on said database.

33. A system as claimed in claim 32, wherein said network address is an internet protocol address that complies with hypertext transfer protocol.

34. A system as claimed in claim 32, wherein said user interface is a computer.

35. A system as claimed in claim 33, wherein said phone number includes a numerical phone extension.

36. A system as claimed in claim 32, wherein said phone number includes an alphanumeric that represents a category of said network site.

37. A system as claimed in claim 32, wherein said network site is capable of receiving said phone number from said user interface and capable of receiving said phone number or said network address from said database.

38. A system as claimed in claim 32, wherein said lookup table includes a list of phone numbers and a list of network sites, wherein each phone number corresponds to a particular network site therein.

39. A system as claimed in claim 32, wherein said phone number includes the country calling code and regional calling code of a particular calling region.

40. A system as claimed in claim 39, wherein said phone number, said country calling code, and said regional calling code are combined before being received by said database.

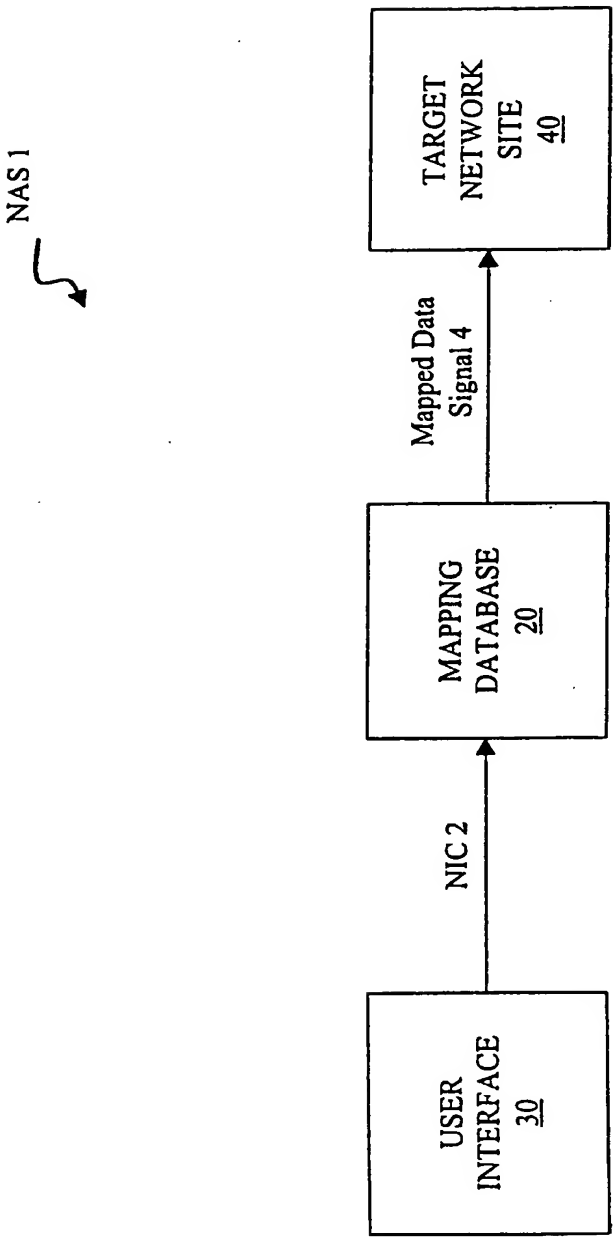
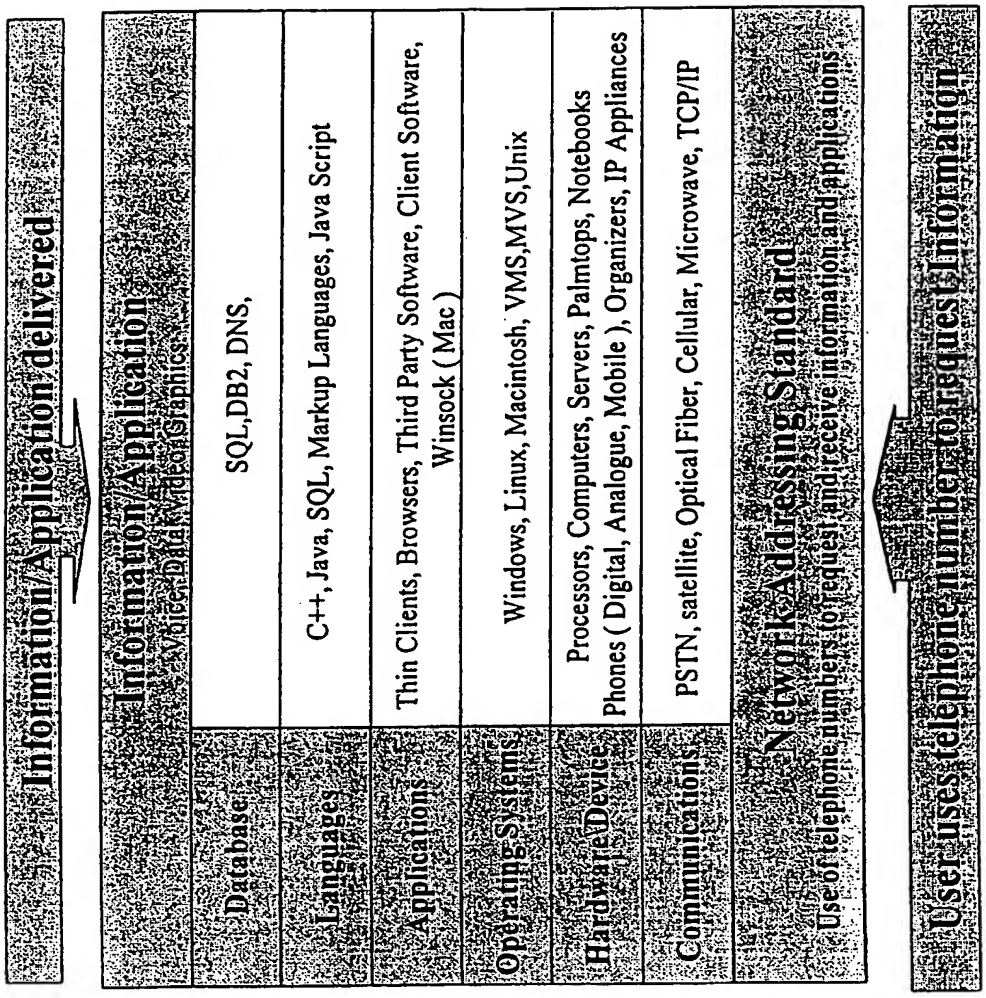

NAS 1
USER INTERFACE 30
NIC 2
MAPPING DATABASE 20
Mapped Data Signal 4
TARGET NETWORK SITE 40

FIG. 1


Information/Application delivered
Information/Application
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Languages
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Operating Systems
Windows, Linux, Macintosh, VMS,MVS,Unix
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Processors, Computers, Servers, Palmtops, Notebooks Phones (Digital, Analogue, Mobile), Organizers, IP Appliances
Communications
PSTN, satellite, Optical Fiber, Cellular, Microwave, TCP/IP
Network Addressing Standard
Use of telephone numbers (or requests) and receive information and applications
User uses telephone number to request information

FIG. 2

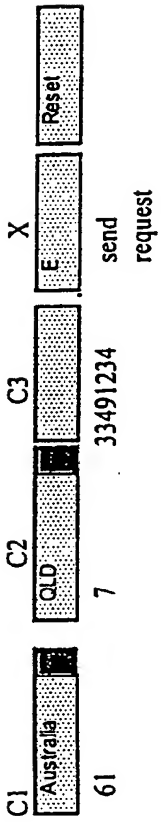


FIG. 3

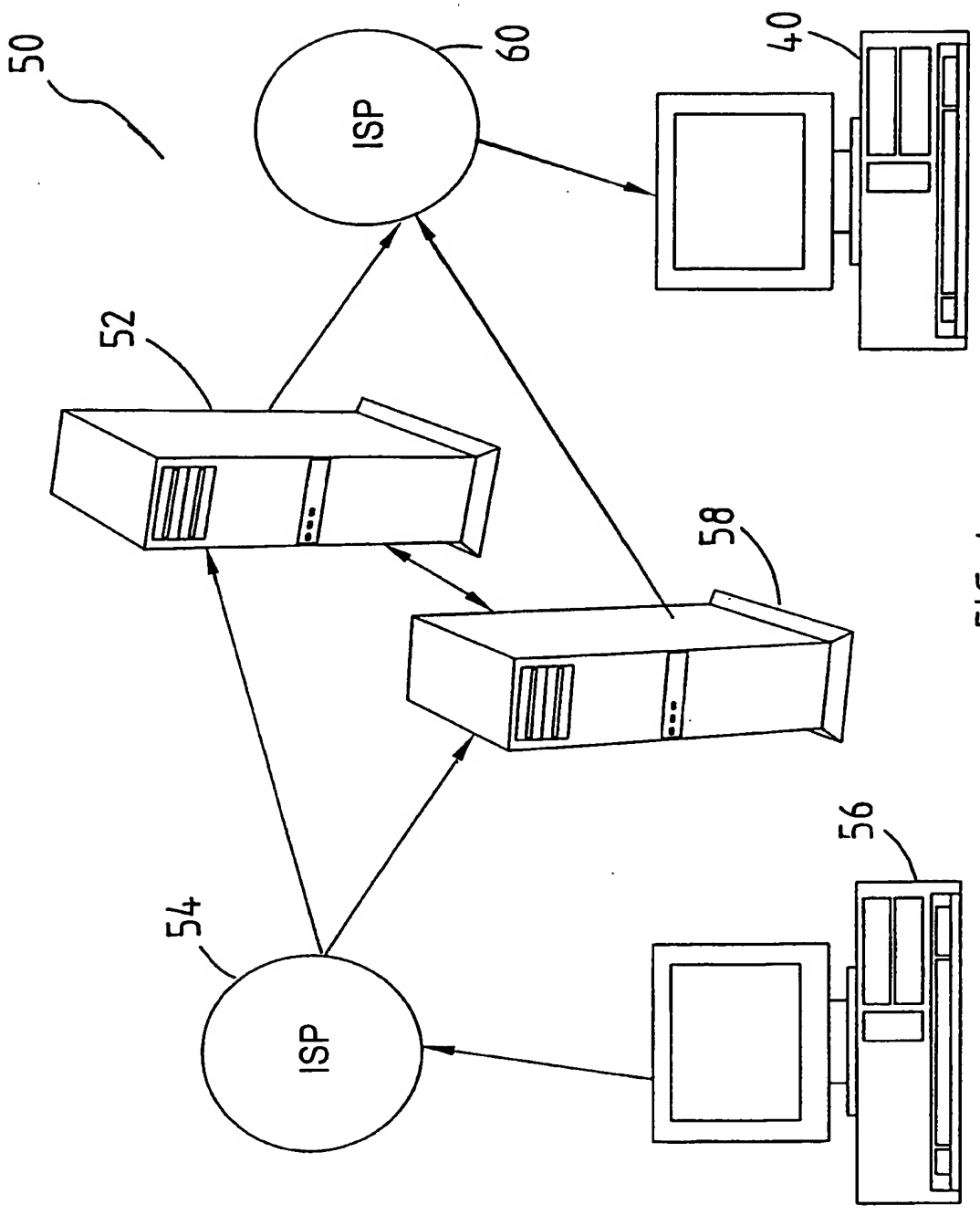
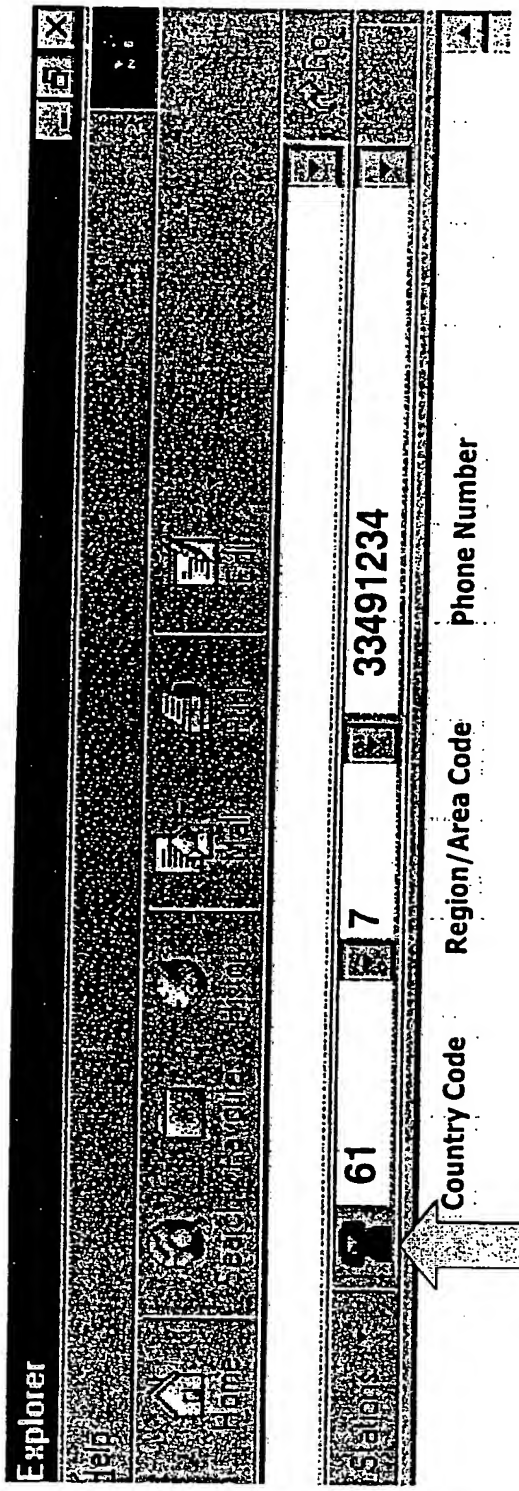


FIG. 4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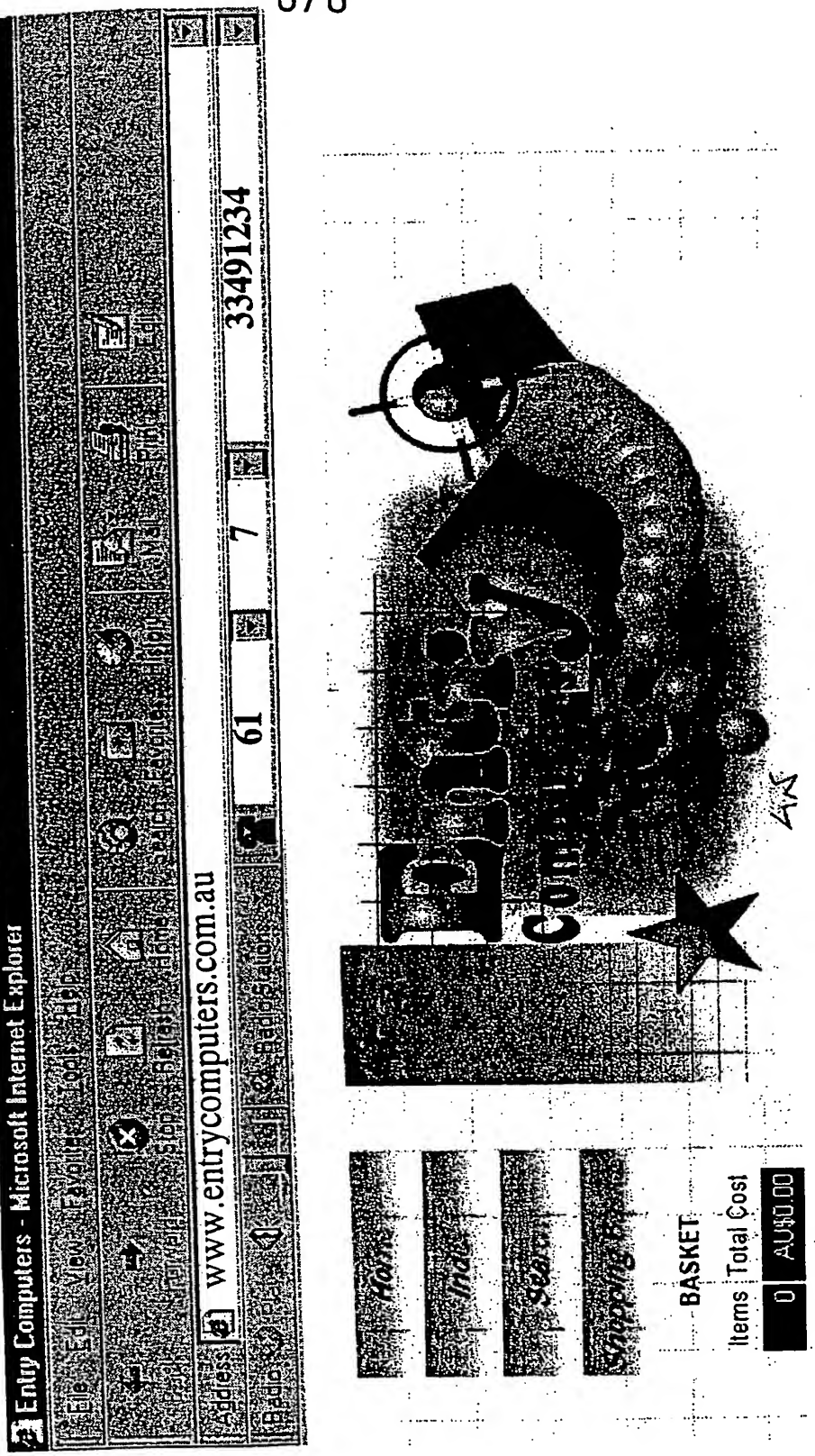
Favorites
61
7
3491234
Country Code
Region/Area Code
Phone Number
SEND

FIG. 5


Entry Computers - Microsoft Internet Explorer
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33491234
Graduation
Home
Index
Search
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BASKET
Items Total Cost
0 AU$0.00

FIG. 6

INTERNATIONAL SEARCH REPORT

International application No.
PCT/AU00/01104

A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl. [7]: G06F 17/30, 17/60

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC G06F, H04L, H04M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
AU:IPC AS ABOVE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
WPAT, USPTO

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 9922488A, D&I SYSTEMS INC, 6 May 1999	1,2,4-14,16-23,25-35,37-40
P,X	WO0041383A, RANALLI et al, 13 July 2000	1,2,4-14,16-23,25-35,37-40
P,X	WO9962242A, 3COM CORPORATION, 2 December 1999	1,2,4-14,16-23,25-35,37-40

[X] Further documents are listed in the continuation of Box C [X] See patent family annex

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Date of the actual completion of the international search
26 October 2000

Date of mailing of the international search report
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/AU00/01104

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5751961A, SMYK, 12 May 1998	
A	US 5764910A, SHACHAR, 9 June 1998	
A	US 5862202A, BASHOURA et al, 19 January 1999	

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/AU00/01104

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Patent Document Cited in Search Report		Patent Family Member					
WO	9962242	AU	42239/99				
US	5751961	CA	2242895	EP	878018	WO	9728553
US	5764910	US	6081842				
US	5862202	AU	69693/98	EP	988745	WO	9846001
		US	6052445				
WO	9922488	AU	96482/98	EP	1031222	US	6061738

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